IN THE CLAIMS:

Please amend the claims as follows:

1.   (Original) A color conversion coefficient preparation apparatus for preparing color conversion coefficients to convert n color values including black in a first machine-dependent color space into n color values including black in a second machine-dependent color space, the color conversion coefficient preparation apparatus comprising:

a first TRC preparation section for preparing a color conversion coefficient for each color to convert the n color values in the first machine-dependent color space into n color values in a first adjustment-machine-dependent color space with adjusted gradation of a single color in the first machine-dependent color space;

a second TRC preparation section for preparing a color conversion coefficient for each color to convert n color values in a second adjustment-machine-dependent color space with adjusted gradation of a single color in the second machine-dependent color space into the n color values in the second machine-dependent color space; and

a K preservation n-dimensional DLUT preparation section for preparing an n-dimensional lookup table for converting the n color values in the first adjustment-machine-dependent color space into the n color values in the second adjustment-machine-dependent color space with the characteristic of black preserved.

2.   (Original) A color conversion coefficient preparation apparatus for preparing color conversion coefficients to convert n color values including black in a first machine-dependent color space into n color values including black in a second machine-dependent color space, the color conversion coefficient preparation apparatus comprising:

a first TRC preparation section for preparing a color conversion coefficient for each color to convert the n color values in the first machine-dependent color space into n color values in a first adjustment-machine-dependent color space with adjusted gradation of a single color in the first machine-dependent color space; and

a K preservation n-dimensional DLUT preparation section for preparing an n-

dimensional lookup table for converting the n color values in the first adjustment-machine-dependent color space into the n color values in the second machine-dependent color space with the characteristic of black preserved.

3.   (Currently Amended) A color conversion coefficient preparation apparatus for preparing color conversion coefficients to convert n color values including black in a first machine-dependent color space into n color values including black in a second machine-dependent color space, the color conversion coefficient preparation apparatus comprising:

a ~~second~~ first TRC preparation section for preparing a color conversion coefficient for each color to convert n color values in a second adjustment-machine-dependent color space with adjusted gradation of a single color in the second machine-dependent color space into the n color values in the second machine-dependent color space; and

a K preservation n-dimensional DLUT preparation section for preparing an n-dimensional lookup table for converting the n color values in the first machine-dependent color space into the n color values in the second adjustment-machine-dependent color space with the characteristic of black preserved.

4.   (Original) A color conversion coefficient preparation apparatus for preparing color conversion coefficients to convert n color values including black in a first machine-dependent color space into n color values including black in a second machine-dependent color space, the color conversion coefficient preparation apparatus comprising:

a first TRC preparation section for preparing a color conversion coefficient for each color to convert the n color values in the first machine-dependent color space into n color values in a first adjustment-machine-dependent color space with adjusted gradation of a single color in the first machine-dependent color space;

a second TRC preparation section for preparing a color conversion coefficient for each color to convert n color values in a second adjustment-machine-dependent color space with

adjusted gradation of a single color in the second machine-dependent color space into the n color values in the second machine-dependent color space;

a K conversion LUT preparation section for preparing a one-dimensional lookup table for converting the value of black in the first adjustment-machine-dependent color space into the value of black in the second adjustment-machine-dependent color space with the characteristic of the value of black preserved; and

an n-dimensional DLUT preparation section for preparing an n-dimensional lookup table for converting the n color values in the first adjustment-machine-dependent color space into the (n-1) color values except for black in the second adjustment-machine-dependent color space.

5.   (Original) A color conversion coefficient preparation apparatus for preparing color conversion coefficients to convert n color values including black in a first machine-dependent color space into n color values including black in a second machine-dependent color space, the color conversion coefficient preparation apparatus comprising:

a first TRC preparation section for preparing a color conversion coefficient for each color except black to convert the (n-1) color values except for black in the first machine-dependent color space into (n-1) color values except for black in a first adjustment-machine-dependent color space with adjusted gradation of a single color in the first machine-dependent color space;

a second TRC preparation section for preparing a color conversion coefficient for each color to convert n color values in a second adjustment-machine-dependent color space with adjusted gradation of a single color in the second machine-dependent color space into the n color values in the second machine-dependent color space;

a K conversion LUT preparation section for preparing a one-dimensional lookup table for converting the value of black in the first machine-dependent color space into the value of black in the second adjustment-machine-dependent color space with the characteristic of the value of black preserved; and

an n-dimensional DLUT preparation section for preparing an n-dimensional lookup table for converting the (n-1) color values except for black in the first adjustment-machine-dependent color space and the value of black in the first machine-dependent color space into the (n-1) color values except for black in the second adjustment-machine-dependent color space.

6.   (Original) A color conversion coefficient preparation apparatus for preparing color conversion coefficients to convert n color values including black in a first machine-dependent color space into n color values including black in a second machine-dependent color space, the color conversion coefficient preparation apparatus comprising:

a first TRC preparation section for preparing a color conversion coefficient for each color to convert the n color values in the first machine-dependent color space into n color values in a first adjustment-machine-dependent color space with adjusted gradation of a single color in the first machine-dependent color space;

a K conversion LUT preparation section for preparing a one-dimensional lookup table for converting the value of black in the first adjustment-machine-dependent color space into the value of black in the second machine-dependent color space with the characteristic of the value of black preserved; and

an n-dimensional DLUT preparation section for preparing an n-dimensional lookup table for converting the n color values in the first adjustment-machine-dependent color space into the (n-1) color values except for black in the second machine-dependent color space.

7.   (Original) A color conversion coefficient preparation apparatus for preparing color conversion coefficients to convert n color values including black in a first machine-dependent color space into n color values including black in a second machine-dependent color space, the color conversion coefficient preparation apparatus comprising

a first TRC preparation section for preparing a color conversion coefficient for each color except black to convert the (n-1) color values except for black in the first machine-

dependent color space into (n-1) color values except for black in a first adjustment-machine-dependent color space with adjusted gradation of a single color in the first machine-dependent color space;

a K conversion LUT preparation section for preparing a one-dimensional lookup table for converting the value of black in the first machine-dependent color space into the value of black in the second machine-dependent color space with the characteristic of the value of black preserved; and

an n-dimensional DLUT preparation section for preparing an n-dimensional lookup table for converting the (n-1) color values except for black in the first adjustment-machine-dependent color space and the value of black in the first machine-dependent color space into the (n-1) color values except for black in the second machine-dependent color space.

8. (Currently Amended) A color conversion coefficient preparation apparatus for preparing color conversion coefficients to convert n color values including black in a first machine-dependent color space into n color values including black in a second machine-dependent color space, the color conversion coefficient preparation apparatus comprising:

a ~~second~~ first TRC preparation section for preparing a color conversion coefficient for each color to convert n color values in a second adjustment-machine-dependent color space with adjusted gradation of a single color in the second machine-dependent color space into the n color values in the second machine-dependent color space;

a K conversion LUT preparation section for preparing a one-dimensional lookup table for converting the value of black in the first machine-dependent color space into the value of black in the second adjustment-machine-dependent color space with the characteristic of the value of black preserved; and

an n-dimensional DLUT preparation section for preparing an n-dimensional lookup table for converting the n color values in the first machine-dependent color space into the (n-1) color values except for black in the second adjustment-machine-dependent color space.

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9.   (Original) A color conversion coefficient preparation apparatus for preparing color conversion coefficients to convert n color values including black in a first machine-dependent color space into n color values including black in a second machine-dependent color space, the color conversion coefficient preparation apparatus comprising:

a K conversion LUT preparation section for preparing a one-dimensional lookup table for converting the value of black in the first machine-dependent color space into the value of black in the second machine-dependent color space with the characteristic of the value of black preserved; and

an n-dimensional DLUT preparation section for preparing an n-dimensional lookup table for converting the n color values in the first machine-dependent color space into the (n-1) color values except for black in the second machine-dependent color space.

10.   (Original) The color conversion coefficient preparation apparatus according to claim 4,

wherein the K conversion LUT preparation section prepares a one-dimensional lookup table for converting from the value of black in the first machine-dependent color space or the first adjustment-machine-dependent color space into the value of black in the second machine-dependent color space; and

the second TRC preparation section prepares a color conversion coefficient for each color of the (n-1) colors except black.

11.   (Original) The color conversion coefficient preparation apparatus according to claim 1, wherein the K preservation n-dimensional DLUT preparation section comprises:

a color specification value prediction section for predicting a color specification vector in a machine-independent color space from the n color values in the first machine-dependent color space or the first adjustment-machine-dependent color

space;

a K conversion section for converting the value of black in the first machine-dependent color space or the first adjustment-machine-dependent color space into the value of black in the second machine-dependent color space or the second adjustment-machine-dependent color space with the characteristic of the value of black preserved; and

an (n-1) color prediction section for predicting (n-1) color values except for black in the second machine-dependent color space or the second adjustment-machine-dependent color space from the color specification vector in the machine-independent color space predicated by the color specification value prediction section and the value of black provided by the K conversion section.

12.   (Original) A color conversion coefficient preparation apparatus for preparing color conversion coefficients to convert n color values including black in a first machine-dependent color space into n color values including black in a second machine-dependent color space, the color conversion coefficient preparation apparatus comprising a K preservation n-dimensional DLUT preparation section for preparing an n-dimensional lookup table for converting the n color values in the first machine-dependent color space into the n color values in the second machine-dependent color space with the characteristic of black preserved,

wherein the K preservation n-dimensional DLUT preparation section comprises:

a color specification value prediction section for predicting a color specification vector in a machine-independent color space from the n color values in the first machine-dependent color space;

a K conversion section for converting the value of black in the first machine-dependent color space into the value of black in the second machine-dependent color space with the characteristic of the value of black preserved; and

an (n-1) color prediction section for predicting (n-1) color values except for

black in the second machine-dependent color space from the color specification

vector in the machine-independent color space predicated by the color specification

value prediction section and the value of black provided by the K conversion section.

13.   (Original) The color conversion coefficient preparation apparatus according to

claim 11,

wherein the K conversion section comprises:

a first K characteristic calculation section for calculating a relationship with

lightness, reflectivity, or density corresponding to the single color of black in the first

machine-dependent color space or the first adjustment-machine-dependent color

space;

a second K characteristic calculation section for calculating a relationship with

lightness, reflectivity, or density corresponding to the single color of black in the

second machine-dependent color space or the second adjustment-machine-dependent

color space;

a K preservation K conversion LUT preparation section for preparing a one-

dimensional lookup table for converting the value of black in the first machine-

dependent color space or the first adjustment-machine-dependent color space into the

value of black in the second machine-dependent color space or the second

adjustment-machine-dependent color space having a characteristic equal to or similar

to that of the value of black by using the relationship calculated by the first K

characteristic calculation section and the relationship calculated by the second K

characteristic calculation section; and

a K preservation K conversion LUT application section for converting the value

of black in the first machine-dependent color space or the first adjustment-machine-

dependent color space into the value of black in the second machine-dependent color

space or the second adjustment-machine-dependent color space by using the one-

dimensional lookup table prepared in the K preservation K conversion LUT preparation section.

14.   (Original) The color conversion coefficient preparation apparatus according to claim 13, wherein the K conversion section further comprises a K correction section for correcting the value of black provided by the K preservation K conversion LUT application section based on the n color values in the second machine-dependent color space or the second adjustment-machine-dependent color space.

15.   (Original) The color conversion coefficient preparation apparatus according to claim 11, wherein the K conversion section comprises a K correction section for correcting the value of black in the first machine-dependent color space or the first adjustment-machine-dependent color space based on the n color values in the second machine-dependent color space or the second adjustment-machine-dependent color space to provide the corrected value of black as the value of black in the second machine-dependent color space or the second adjustment-machine-dependent color space.

16.   (Original) The color conversion coefficient preparation apparatus according to claim 4, wherein the K conversion LUT preparation section comprises:

a first K characteristic calculation section for calculating a relationship with lightness, reflectivity, or density corresponding to the single color of black in the first machine-dependent color space or the first adjustment-machine-dependent color space;

a second K characteristic calculation section for calculating the relationship with lightness, reflectivity, or density corresponding to the single color of black in the second machine-dependent color space or the second adjustment-machine-dependent color space; and

a K preservation K conversion LUT preparation section for preparing a one-dimensional lookup table for converting the value of black in the first machine-dependent color space or the first adjustment-machine-dependent color space into the value of black in the second machine-dependent color space or the second adjustment-machine-dependent color space having a characteristic equal to or similar to that of the value of black by using the relationship calculated by the first K characteristic calculation section and the relationship calculated by the second K characteristic calculation section.

17.   (Original) The color conversion coefficient preparation apparatus according to claim 1, wherein the second TRC preparation section prepares a one-dimensional lookup table for executing inverse conversion to conversion from the values in the second machine-dependent color space to values in the second adjustment-machine-dependent color space for each of the n color values or the (n-1) color values except for black.

18.   (Original) The color conversion coefficient preparation apparatus according to claim 1, wherein the first TRC preparation section, the second TRC preparation section, or the K preservation n-dimensional DLUT preparation section prepares a one-dimensional lookup table or an n-dimensional lookup table as the color conversion coefficient so that the under color of paper becomes white.

19.   (Original) The color conversion coefficient preparation apparatus according to claim 1 further comprising n-dimensional DLUT reset section for forcibly replacing with predetermined values, data of n colors, (n-1) colors, (n-2) colors, or (n-m) colors that a specific grid point, grid points on a specific line, grid points on a specific plane, or grid points on a specific m-dimensional area of the n-dimensional lookup table prepared by said K preservation n-dimensional DLUT preparation section have.

20.   (Original) The color conversion coefficient preparation apparatus according to claim 19, wherein the n-dimensional DLUT reset section forcibly sets to all 0, the data of the n colors that the grid point with the n color values being all 0 corresponding to address data of the n-dimensional lookup table has.

21.   (Original) The color conversion coefficient preparation apparatus according to claim 19, wherein the n-dimensional DLUT reset section forcibly sets to all 0, the data of black that the grid point with the value of black being 0 corresponding to address data of the n-dimensional lookup table has.

22.   (Original) The color conversion coefficient preparation apparatus according to claim 19, wherein the n-dimensional DLUT reset section forcibly sets to all 0, the data of the (n-1) colors except black that the grid point with the values of the (n-1) colors except black being all 0 corresponding to address data of the n-dimensional lookup table has.

23.   (Original) The color conversion coefficient preparation apparatus according to claim 19, wherein the n-dimensional DLUT reset section forcibly sets to all 0, the data of the (n-1) colors other than a specific color that the grid point with the values of the (n-1) colors except the specific color other than black being 0 corresponding to address data of the n-dimensional lookup table has.

24.   (Original) The color conversion coefficient preparation apparatus according to claim 19, wherein the n-dimensional DLUT reset section forcibly sets to all 0, the data of two colors that the grid point of secondary color with the values of the two colors being 0 corresponding to address data of the n-dimensional lookup table has.

25. (Original) The color conversion coefficient preparation apparatus according to claim 19 further comprising a user interface for enabling a user to set an item to be reset by the n-dimensional DLUT reset section.

26. (Original) The color conversion coefficient preparation apparatus according to claim 19, wherein the n-dimensional DLUT reset section further makes a re-determination so that data of any other color except for the color forcibly replaced with the predetermined value becomes roughly equivalent to representation color before forcible replacement with the predetermined value.

27. (Original) The color conversion coefficient preparation apparatus according to claim 26, wherein the n-dimensional DLUT reset section forcibly sets to all 0, the data of black that the grid point with the value of black being 0 corresponding to address data of the n-dimensional lookup table has; and

the n-dimensional DLUT reset section makes a re-determination so that data of any other color than black becomes roughly equivalent to representation color before the value of black is set to 0.

28. (Original) The color conversion coefficient preparation apparatus according to claim 26, wherein the n-dimensional DLUT reset section forcibly sets to all 0, the data of the (n-1) colors except black that the grid point with the values of the (n-1) colors except black being all 0 corresponding to address data of the n-dimensional lookup table has; and

the n-dimensional DLUT reset section makes a re-determination so that black becomes roughly equivalent to representation color before the values of the (n-1) colors except black are set to 0.

29. (Original) The color conversion coefficient preparation apparatus according to

claim 26, wherein the n-dimensional DLUT reset section forcibly sets to all 0, the data of the (n-1) colors other than a specific color that the grid point with the values of the (n-1) colors except the specific color other than black being all 0 corresponding to address data of the n-dimensional lookup table has; and

the n-dimensional DLUT reset section makes a re-determination so that data of the specific colors other than black becomes roughly equivalent to representation color before the values of the (n-1) colors are set to 0.

30. (Original) The color conversion coefficient preparation apparatus according to claim 26, wherein the n-dimensional DLUT reset section forcibly sets to all 0, the data of two colors that the grid point of secondary color with the values of the two colors being 0 corresponding to address data of the n-dimensional lookup table has; and

the n-dimensional DLUT reset section makes a re-determination so that data of (n-2) colors other than the two colors whose values are forcibly set to all 0 becomes roughly equivalent to representation color before the data of the two colors are forcibly set to all 0.

31. (Original) The color conversion coefficient preparation apparatus according to claim 1, wherein the first TRC preparation section, the second TRC preparation section, and the K preservation n-dimensional DLUT preparation section use colorimetric values of color charts printed by a first machine and a second machine.

32. (Original) The color conversion coefficient preparation apparatus according to claim 1, wherein the first TRC preparation section, the second TRC preparation section, and the K preservation n-dimensional DLUT preparation section use color values prepared from conversion definition previously prepared corresponding to a first machine and a second machine.

33. (Original) The color conversion coefficient preparation apparatus according to claim 1 wherein at least the K preservation n-dimensional DLUT preparation section or the n-dimensional DLUT preparation section uses colorimetric values of color charts printed by a first machine and color values prepared from conversion definition previously prepared corresponding to a second machine.

34. (Original) The color conversion coefficient preparation apparatus according to claim 1, wherein at least the K preservation n-dimensional DLUT preparation section or the n-dimensional DLUT preparation section uses color values prepared from conversion definition previously prepared corresponding to a first machine and colorimetric values of color charts printed by a second machine.

35. (Original) The color conversion coefficient preparation apparatus according to claim 1, wherein the n colors are four colors of black, cyan, magenta, and yellow.

36. (Original) A computer-readable storage medium storing a program for:

preparing a color conversion coefficient for each color to convert n color values in a first machine-dependent color space into n color values in a first adjustment-machine-dependent color space with adjusted gradation of a single color in the first machine-dependent color space;

preparing a color conversion coefficient for each color as inverse conversion to conversion of n color values in a second machine-dependent color space to n color values in a second adjustment-machine-dependent color space with adjusted gradation of a single color in the second machine-dependent color space; and

preparing an n-dimensional lookup table for converting the n color values in the first adjustment-machine-dependent color space into the n color values in the second adjustment-machine-dependent color space with the characteristic of black preserved by using the conversion result from the first machine-dependent color space to the first adjustment-machine-dependent

color space and the conversion result from the second machine-dependent color space to the second adjustment-machine-dependent color space.

37.   (Original) A color conversion system for executing color conversion processing using a one-dimensional lookup table and an n-dimensional lookup table prepared in a color conversion coefficient preparation apparatus according to claim 1, the color conversion system comprising:

a first TRC application section for executing conversion by applying a color conversion coefficient prepared for each color for converting n color values in a first machine-dependent color space into n color values in a first adjustment-machine-dependent color space with adjusted gradation of a single color in the first machine-dependent color space to n color values including black that each pixel of an input color image has;

a K preservation n-dimensional DLUT application section for applying the n-dimensional lookup table for converting the n color values in the first adjustment-machine-dependent color space provided by the first TRC application section into n color values in a second adjustment-machine-dependent color space with the characteristic of black preserved to the n color values in the first adjustment-machine-dependent color space provided by the first TRC application section; and

a second TRC application section for executing conversion by applying a color conversion coefficient prepared for each color for converting n color values in the second adjustment-machine-dependent color space with adjusted gradation of a single color in a second machine-dependent color space into n color values in the second machine-dependent color space to the n color values provided by the K preservation n-dimensional DLUT application section.

38.   (Original) A color conversion system for executing color conversion processing using a one-dimensional lookup table and an n-dimensional lookup table prepared in a color conversion coefficient preparation apparatus according to claim 2, the color conversion system

comprising:

a first TRC application section for executing conversion by applying a color conversion coefficient prepared for each color for converting n color values in a first machine-dependent color space into n color values in a first adjustment-machine-dependent color space with adjusted gradation of a single color in the first machine-dependent color space to n color values including black that each pixel of an input color image has; and

a K preservation n-dimensional DLUT application section for applying the n-dimensional lookup table for converting the n color values in the first adjustment-machine-dependent color space provided by the first TRC application section into n color values in a second machine-dependent color space with the characteristic of K preserved to the n color values in the first adjustment-machine-dependent color space provided by the first TRC application section.

39.　(Currently Amended) A color conversion system for executing color conversion processing using a one-dimensional lookup table and an n-dimensional lookup table prepared in a color conversion coefficient preparation apparatus according to claim 3, the color conversion system comprising:

a K preservation n-dimensional DLUT application section for applying the n-dimensional lookup table for converting n color values in the first machine-dependent color space into n color values in a second adjustment-machine-dependent color space with the characteristic of K preserved to the n color values including black that each pixel of an input color image has; and

a ~~second~~ first TRC application section for executing conversion by applying a color conversion coefficient prepared for each color for converting n color values in the second adjustment-machine-dependent color space with adjusted gradation of a single color in a second machine-dependent color space into n color values in the second machine-dependent color space

to the n color values provided by the K preservation n-dimensional DLUT application section.

40.   (Original) A color conversion system for executing color conversion processing using a one-dimensional lookup table and an n-dimensional lookup table prepared in a color conversion coefficient preparation apparatus according to claim 4, the color conversion system comprising:

a first TRC application section for executing conversion by applying a color conversion coefficient prepared for each color for converting n color values in a first machine-dependent color space into n color values in a first adjustment-machine-dependent color space with adjusted gradation of a single color in the first machine-dependent color space to n color values including black that each pixel of an input color image has;

a K conversion LUT application section for applying the one-dimensional lookup table for converting the value of black in the first adjustment-machine-dependent color space into the value of black in a second adjustment-machine-dependent color space with the characteristic of the value of black preserved to the value of black in the first adjustment-machine-dependent color space provided by the first TRC application section;

an n-dimensional DLUT application section for applying the n-dimensional lookup table for converting the n color values in the first adjustment-machine-dependent color space provided by the first TRC application section into (n-1) color values except for black in the second adjustment-machine-dependent color space to the n color values in the first adjustment-machine-dependent color space provided by the first TRC application section; and

a second TRC application section for executing conversion by applying a color conversion coefficient prepared for each color for converting n color values in the second adjustment-machine-dependent color space with adjusted gradation of a single color in a second machine-dependent color space into n color values in the second machine-dependent color space to the (n-1) color values except for black provided by the n-dimensional DLUT application section and the value of black provided by the K conversion LUT application section.

41.   (Original) A color conversion system for executing color conversion processing using a one-dimensional lookup table and an n-dimensional lookup table prepared in a color conversion coefficient preparation apparatus according to claim 5, the color conversion system comprising:

a first TRC application section for executing conversion by applying a color conversion coefficient prepared for each color for converting (n-1) color values except for black in a first machine-dependent color space into (n-1) color values except for black in a first adjustment-machine-dependent color space with adjusted gradation of a single color in the first machine-dependent color space to (n-1) color values except for black of n color values including black that each pixel of an input color image has;

a K conversion LUT application section for applying the one-dimensional lookup table for converting the value of black in the first machine-dependent color space into the value of black in a second adjustment-machine-dependent color space with the characteristic of the value of black preserved to the value of black that each pixel of the input color image has;

an n-dimensional DLUT application section for applying the n-dimensional lookup table for converting the (n-1) color values except for black in the first adjustment-machine-dependent color space and the value of black in the first machine-dependent color space into (n-1) color values except for black in the second adjustment-machine-dependent color space to the (n-1) color values except for black in the first adjustment-machine-dependent color space provided by the first TRC application section and the value of black that each pixel of the input color image has; and

a second TRC application section for executing conversion by applying a color conversion coefficient prepared for each color for converting n color values in the second adjustment-machine-dependent color space with adjusted gradation of a single color in a second machine-dependent color space into n color values in the second machine-dependent color space to the (n-1) color values except for black provided by the n-dimensional DLUT application

section and the value of black provided by the K conversion LUT application section.

42.   (Original) A color conversion system for executing color conversion processing using a one-dimensional lookup table and an n-dimensional lookup table prepared in a color conversion coefficient preparation apparatus according to claim 6, the color conversion system comprising:

a first TRC application section for executing conversion by applying a color conversion coefficient prepared for each color for converting n color values in a first machine-dependent color space into n color values in a first adjustment-machine-dependent color space with adjusted gradation of a single color in the first machine-dependent color space to n color values including black that each pixel of an input color image has;

a K conversion LUT application section for applying the one-dimensional lookup table for converting the value of black in the first adjustment-machine-dependent color space into the value of black in a second adjustment-machine-dependent color space with the characteristic of the value of black preserved to the value of black in the first adjustment-machine-dependent color space provided by the first TRC application section; and

an n-dimensional DLUT application section for applying the n-dimensional lookup table for converting the n color values in the first adjustment-machine-dependent color space into (n-1) color values except for black in the second machine-dependent color space to the n color values in the first adjustment-machine-dependent color space provided by the first TRC application section.

43.   (Original) A color conversion system for executing color conversion processing using a one-dimensional lookup table and an n-dimensional lookup table prepared in a color conversion coefficient preparation apparatus according to claim 7, the color conversion system comprising:

a first TRC application section for executing conversion by applying a color conversion

coefficient prepared for each color for converting (n-1) color values except for black in a first machine-dependent color space into (n-1) color values except for black in a first adjustment-machine-dependent color space with adjusted gradation of a single color in the first machine-dependent color space to (n-1) color values except for black of n color values including black that each pixel of an input color image has;

a K conversion LUT application section for applying the one-dimensional lookup table for converting the value of black in the first machine-dependent color space into the value of black in a second machine-dependent color space with the characteristic of the value of black preserved to the value of black that each pixel of the input color image has; and

an n-dimensional DLUT application section for applying the n-dimensional lookup table for converting the (n-1) color values except for black in the first adjustment-machine-dependent color space and the value of black in the first machine-dependent color space into (n-1) color values except for black in the second machine-dependent color space to the (n-1) color values except for black in the first adjustment-machine-dependent color space provided by the first TRC application section and the value of black that each pixel of the input color image has.

44. (Currently Amended) A color conversion system for executing color conversion processing using a one-dimensional lookup table and an n-dimensional lookup table prepared in a color conversion coefficient preparation apparatus according to claim 8, the color conversion system comprising:

an n-dimensional DLUT application section for applying the n-dimensional lookup table for converting n color values in the first machine-dependent color space into (n-1) color values except for black in a second adjustment-machine-dependent color space to n color values including black that each pixel of an input color image has;

a K conversion LUT application section for applying the one-dimensional lookup table for converting the value of black in the first machine-dependent color space into the value of black in a second adjustment-machine-dependent color space with the characteristic of the value

of black preserved to the value of black that each pixel of the input color image has; and

a ~~second~~ first TRC application section for executing conversion by applying a color conversion coefficient prepared for each color to convert n color values in the second adjustment-machine-dependent color space with adjusted gradation of a single color in a second machine-dependent color space into n color values in the second machine-dependent color space to the (n-1) color values except for black provided by the n-dimensional DLUT application section and the value of black provided by the K conversion LUT application section.

45.   (Original) A color conversion system for executing color conversion processing using a one-dimensional lookup table and an n-dimensional lookup table prepared in a color conversion coefficient preparation apparatus according to claim 9, the color conversion system comprising:

an n-dimensional DLUT application section for applying the n-dimensional lookup table for converting n color values in the first machine-dependent color space into (n-1) color values except for black in a second machine-dependent color space to n color values including black that each pixel of an input color image has; and

a K conversion LUT application section for applying the one-dimensional lookup table for converting the value of black in the first machine-dependent color space into the value of black in a second machine-dependent color space with the characteristic of the value of black preserved to the value of black that each pixel of the input color image has.

46.   (Original) The color conversion system according to claim 40, wherein the K conversion LUT application section applies the one-dimensional lookup table for converting from the value of black in the first machine-dependent color space or the first adjustment-machine-dependent color space into the value of black in the second machine-dependent color space to the value of black that each pixel of the input color image has or the value of black in the first adjustment-machine-dependent color space provided by the first TRC application

section; and

the second TRC application section executes conversion by applying a color conversion coefficient prepared for each color to convert (n-1) color values except for black in the second adjustment-machine-dependent color space with adjusted gradation of a single color in the second machine-dependent color space into (n-1) color values except for black in the second machine-dependent color space to the (n-1) color values except for black provided by the n-dimensional DLUT application section.

47.   (Original) The color conversion coefficient preparation apparatus according to claim 37, wherein the n colors are four colors of black, cyan, magenta, and yellow.

Claims 48-54. (Canceled)